

Abstract ID : 333

Title : Inia geoffrensis Color Vision Behavioral Research

Category : Behavior

Student : Not Applicable

Preferred Format : Either Oral or Poster Presentation

Abstract : Amazon river dolphins (*Inia geoffrensis*) are in a "threatened" category. They are very unique and very little research has been done on them. My personal interests and their distinct characteristics led to my ideas for the experiment.

The purpose of my research was to find out if the *Inia* at the Pittsburgh Zoo and PPG Aquarium could identify primary colors. I observed he repeatedly chose activity toys of the same color. From those observations, I created a floating color tester. The tester had four separate "targets", displaying the colors red, green, blue, and yellow. I also had four of the same colored footballs. When the dolphin was shown a certain colored football, he then had to touch the same color target. The correct response chosen was rewarded with positive reinforcement. Each color was tested 16 times per session responses were logged for 33 daily session, 846 tests were done.

The data collected was calculated into graphs. The results showed the dolphin correctly identified all primary colors over 60% of the time. He was observed moving the tester around to find the correct color. The colors blue and red had the highest number of correct "target-to target" consecutive color matches 16 out of 16. Green was matched 13 out of 15 and yellow 14 out of 16 consecutively during individual color sessions.

In conclusion there is a possibility that the *Inia geoffrensis* can identify and distinguish colors. Further tests must be done to determine if it was color he chose or the difference in color density. Hopefully this and continued research, may help in their preservation.